

Cumberland County



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Bridgeton Avenue Ground Water Contamination

Bridgeton, Morton & Landis Avenues

Deerfield Township

Cumberland County

BLOCK: Various **LOT:** Various

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Not Applicable
OPERATION STATUS: Not Applicable

PROPERTY SIZE: Not Applicable

SURROUNDING LAND USE: Residential/Commercial

MEDIA AFFECTED

Ground Water

CONTAMINANTS

1,2,3-Trichloropropane
Mercury

STATUS

Confirmed

Potable Water

1,2,3-Trichloropropane
Mercury

Treating

FUNDING SOURCES









Spill Fund
1981 Bond Fund
Corporate Business Tax

AMOUNT AUTHORIZED

\$205,000
\$31,000
\$175,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

This ground water contamination site is centered near the intersection of Landis Avenue and Morton Avenue in Deerfield Township, but extends into Pittsgrove Township in Salem County. Sampling conducted by NJDEP's Bureau of Safe Drinking Water in 2000 revealed the potable wells at two commercial establishments in this area were contaminated with 1,2,3-trichloropropane at levels exceeding New Jersey's drinking water guideline for this compound. In 2001 NJDEP's Remedial Response Element identified 29 other private potable wells at residential and commercial properties in the area that exceeded the drinking water guideline for 1,2,3-trichloropropane and three private potable wells that exceeded the New Jersey Drinking Water Standard for mercury. The sources of the contamination are unknown. NJDEP's Environmental Claims Administration has installed Point-of-Entry Treatment (POET) systems on the contaminated wells to provide potable water for the residents while additional evaluation of the site is underway. The Remedial Response Element will sample additional nearby private potable wells in 2004 and use the findings to delineate the Currently Known Extent (CKE) of the potable well contamination and evaluate long-term options to supply potable water to residents at the site.

PROJECT NAME	RI/RAS	DESIGN	CONSTR	O&M
Receptor Control (POETS)				
		Planned		
		Underway		
		Completed		
		Not Required		

Bridgeton City Water Department Well Field Contamination

Burlington Road Bridgeton City Cumberland County

BLOCK: 9 **LOT:** 10

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Not Applicable
OPERATION STATUS: Not Applicable

PROPERTY SIZE: Not Applicable

SURROUNDING LAND USE: Residential/Commercial

MEDIA AFFECTED

Ground Water

CONTAMINANTS

Trichloroethylene

STATUS

Confirmed

Potable Water

Trichloroethylene

Treating

FUNDING SOURCES

1986 Bond Fund

AMOUNT AUTHORIZED

\$610,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Routine sampling conducted by the Bridgeton City Water Department in 1994 revealed two of their municipal supply wells were contaminated with trichloroethylene (TCE) at levels exceeding the New Jersey Drinking Water Standard for this volatile organic compound. Water from the contaminated wells was temporarily blended with water from another source to reduce the TCE to levels below the Drinking Water Standard. In 1997 NJDEP's Remedial Response Element completed a Remedial Action Selection (RAS) that concluded the most cost-effective method to remedy the contamination was to install an air stripper on each of the wells. Bridgeton City completed construction of the air strippers in 1999 using funds provided by NJDEP and is operating and maintaining the systems. Additional investigative work is planned to identify possible sources of the ground water contamination at this site.

PROJECT NAME	RI/RAS	DESIGN	CONSTR	O&M
Receptor Control (Air Stripper)				

Planned
 Underway
 Completed
 Not Required

Deerfield Township Ground Water Contamination

Kenyon Avenue

Deerfield Township

Cumberland County

BLOCK: Various **LOT:** Various

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Not Applicable
OPERATION STATUS: Not Applicable

PROPERTY SIZE: Not Applicable

SURROUNDING LAND USE: Residential

MEDIA AFFECTED

Ground Water

CONTAMINANTS

Mercury

STATUS

Confirmed

Potable Water

Mercury

Treating

FUNDING SOURCES









Spill Fund

AMOUNT AUTHORIZED

\$65,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Sampling conducted by the Cumberland County Health Department in 1993 identified 12 private potable wells in this area that were contaminated with mercury at levels exceeding New Jersey Drinking Water Standards. Additional sampling has sporadically revealed mercury compounds in the ground water throughout Deerfield Township. NJDEP's Environmental Claims Administration installed Point-of-Entry Treatment (POET) systems on the contaminated wells to supply potable water for the residents. NJDEP completed a source investigation in 1997 that concluded the mercury contamination was the result of historical agricultural practices combined with relatively shallow private wells. NJDEP is periodically sampling private potable wells in the area to monitor ground water quality.

PROJECT NAME	RI/RAS	DESIGN	CONSTR	O&M
Receptor Control (POETS)				
	 Planned			
	 Underway			
	 Completed			
	 Not Required			

Elmer Road East Ground Water Contamination

Elmer Road East

Vineland City

Cumberland County

BLOCK: Various **LOT:** Various

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Not Applicable
OPERATION STATUS: Not Applicable

PROPERTY SIZE: Not Applicable

SURROUNDING LAND USE: Residential

MEDIA AFFECTED

Ground Water

CONTAMINANTS

Mercury

STATUS

Confirmed

Potable Water

Mercury

Alternate Water Supply Provided

FUNDING SOURCES

Spill Fund

Corporate Business Tax









AMOUNT AUTHORIZED





\$17,000

\$10,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Sampling conducted by the Vineland City Health Department in 2001 identified six private potable wells in this area that were contaminated with mercury at levels exceeding the New Jersey Drinking Water Standard for this metal. The source of the contamination is unknown. The City of Vineland extended public water lines to these properties in 2001 to provide potable water for the residents. NJDEP's Remedial Response Element subsequently identified four additional wells in the area that were contaminated with mercury at levels exceeding the Drinking Water Standard. NJDEP's Environmental Claims Administration installed Point-of-Entry Treatment (POET) systems on the contaminated wells as an interim measure and Vineland City extended water lines to the affected homes in 2002 as a permanent remedy. Approximately twelve other homes within the Currently Known Extent (CKE) of the mercury contamination that currently do not have elevated levels of mercury in their potable wells are also eligible for connection to the public water lines under the Spill Fund program. NJDEP is periodically sampling private potable wells around the CKE to monitor ground water quality in the area.

PROJECT NAME	RI/RAS	DESIGN	CONSTR	O&M
Receptor Control (POETS)				
Receptor Control (Water Line Connections)				

 Planned
 Underway
 Completed
 Not Required

Fairfield Adult Medical Day Care

238 New England Cross Road

Fairfield Township

Cumberland County

BLOCK: Various **LOT:** Various

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Not Applicable
OPERATION STATUS: Not Applicable

PROPERTY SIZE: Not Applicable

SURROUNDING LAND USE: Residential

MEDIA AFFECTED

Ground Water

CONTAMINANTS

1,2,3-Trichloropropane
1,2-Dichloropropane
Benzene

STATUS

Confirmed

Potable Water

1,2,3-Trichloropropane
1,2-Dichloropropane
Benzene

Treating

FUNDING SOURCES

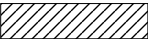







Spill Fund
1981 Bond Fund
Corporate Business Tax

AMOUNT AUTHORIZED

\$28,000
\$15,000
\$50,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Sampling conducted by NJDEP's Bureau of Safe Drinking Water in 2000 revealed the private potable well at the Fairfield Adult Medical Day Care facility was contaminated with 1,2,3-trichloropropane, 1,2-dichloropropane and/or benzene at levels exceeding New Jersey Drinking Water Standards and guidelines. The source of the contamination is unknown. NJDEP's Remedial Response Element conducted additional sampling in 2001 and 2003 that identified other private potable wells in the area that were contaminated with 1,2,3-trichloropropane at levels exceeding the drinking water guidelines. NJDEP's Environmental Claims Administration installed Point-of-Entry Treatment (POET) systems on the contaminated wells to supply potable water for the residents. NJDEP has concluded the contaminated wells identified during this investigation do not meet the criteria for a potable well contamination site because they are located too far apart. Consequently, a Currently Known Extent (CKE) of the potable well contamination will not be delineated and a water supply alternatives analysis will not be conducted. NJDEP is monitoring and maintaining the POET systems to ensure the units continue to operate effectively.

PROJECT NAME	RI/RAS	DESIGN	CONSTR	O&M	
Receptor Control (POETS)					 Planned
					 Underway
					 Completed
					 Not Required

Gagliardi Demolition

267 North Mill Road

Vineland Township

Cumberland County

BLOCK: 401 **LOT:** 1

CATEGORY: Non-Superfund
State Lead

TYPE OF FACILITY: Junk Yard
OPERATION STATUS: Inactive

PROPERTY SIZE: 1.5 Acres

SURROUNDING LAND USE: Commercial/Residential

MEDIA AFFECTED

CONTAMINANTS

STATUS

Ground Water

Metals

Levels Not of Concern

Soil

Semi-Volatile Organic Compounds
Polychlorinated Biphenyls (PCBs)
Metals

Delineated

Air

Radiation

Levels Not of Concern

FUNDING SOURCES

Corporate Business Tax

AMOUNT AUTHORIZED

\$240,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

This site operated as a junk yard from 1958 to 1992. The debris has since been removed and the property is currently a vacant lot. The site is fenced to prevent trespassing. The findings of preliminary investigation performed by NJDEP in 1997 indicated soil and ground water at the site were contaminated with hazardous substances, including polychlorinated biphenyls (PCBs). Between 1999 and 2002 NJDEP's Remedial Response Element conducted a Remedial Investigation and Remedial Action Selection (RI/RAS) that revealed the surface soil over approximately 70% of the site was contaminated with polychlorinated biphenyls (PCBs) and metals at levels exceeding NJDEP's soil cleanup criteria. Radiological analysis of soil samples indicated low levels of radiation but these levels were determined not to present a health threat. In addition, the RI/RAS revealed that the ground water at the site was not significantly contaminated. NJDEP plans to issue a Proposed Decision Document recommending final remedial actions for the soil in mid-2004. This site has been designated as a potential Brownfields Redevelopment site by NJDEP and the City of Vineland.

PROJECT NAME	RI/RAS	DESIGN	CONSTR	O&M
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Sitewide				
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Planned



Underway



Completed



Not Required

Iceland Coin Laundry & Dry Cleaning

1888 Delsea Drive South

Vineland City

Cumberland County

BLOCK: Various **LOT:** Various

CATEGORY: Superfund
Federal Lead

TYPE OF FACILITY: Not Applicable
OPERATION STATUS: Not Applicable

PROPERTY SIZE: Not Applicable

SURROUNDING LAND USE: Residential/Commercial

MEDIA AFFECTED

Ground Water

CONTAMINANTS

Volatile Organic Compounds
Mercury

STATUS

Delineating

Potable Water

Volatile Organic Compounds
Mercury

Alternate Water Supply Provided

Soil

Volatile Organic Compounds

Delineating

FUNDING SOURCES

Superfund

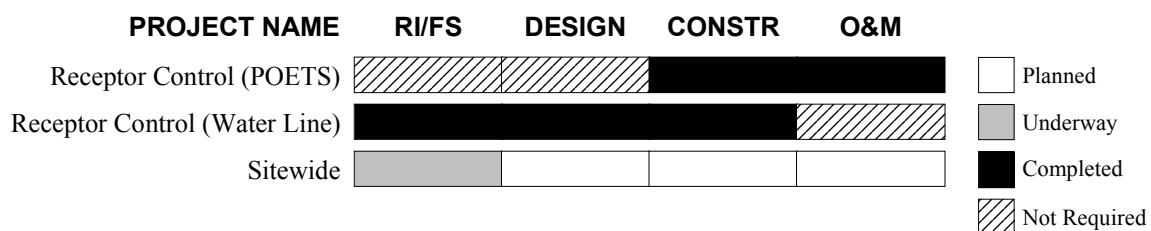
AMOUNT AUTHORIZED

\$1,700,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

This site is also known as the Iceland Coin Laundry Area Ground Water Plume. Sampling conducted by the Vineland City Health Department in 1991 identified 16 private potable wells in the area that were contaminated with volatile organic compounds and/or mercury at levels exceeding New Jersey Drinking Water Standards. The primary volatile organic contaminants are tetrachloroethylene (also known as perchloroethylene, or PCE), trichloroethylene (TCE) and dichloroethylene (DCE). The contaminated ground water plume extends from South Delsea Drive, Dirk Drive, Garrison Road, Lois Lane, South Orchard Road, West Elmer Road and West Korff Drive. NJDEP installed Point-of-Entry Treatment (POET) systems on the contaminated wells as an interim measure to provide potable water for the residents and Vineland City extended public water lines to the area in 1994 as a final remedy.

NJDEP completed a preliminary assessment and site investigation in 1998 that identified Iceland Coin Laundry & Dry Cleaning, an inactive establishment formerly located on Delsea Drive, as a Potentially Responsible Party for the volatile organic contamination in the ground water. However, the sampling data indicated there may be at least one additional source of volatile organic contamination in the area. USEPA added Iceland Coin Laundry & Dry Cleaning to the National Priorities List of Superfund sites (NPL) in 1999 and began a Remedial Investigation and Feasibility Study (RI/FS) to delineate the contamination and evaluate cleanup alternatives. The ground water sampling phase of the RI/FS is underway.



Nascolite Corporation

Doris Avenue

Millville City

Cumberland County

BLOCK: 234 **LOT:** 60

CATEGORY: Superfund
Federal Lead

TYPE OF FACILITY: Plastics Manufacturing
OPERATION STATUS: Inactive

PROPERTY SIZE: 17.4 Acres

SURROUNDING LAND USE: Residential/Industrial

MEDIA AFFECTED

Ground Water

CONTAMINANTS

Volatile Organic Compounds
Semi-Volatile Organic Compounds

STATUS

Treating

Soil

Lead

Delineated

Structures

Asbestos

Demolition/Asbestos Abatement
Completed

FUNDING SOURCES

Superfund
1986 Bond Fund
Corporate Business Tax

AMOUNT AUTHORIZED

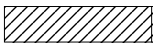


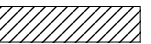






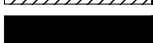


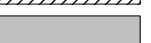






\$23,500,000
\$700,000
\$1,400,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Nascolite Corporation reclaimed scrap acrylic material and manufactured Plexiglas sheets at this site between 1953 and 1980. Liquid wastes from the distillation of scrap acrylic were stored in several underground storage tanks at the plant. Shortly after operations at the site ceased, NJDEP conducted a preliminary investigation that revealed at least one of the underground storage tanks had leaked and contaminated the soil and ground water. In 1984 USEPA added Nascolite Corporation to the National Priorities List of Superfund sites (NPL). NJDEP began an initial Remedial Investigation and Feasibility Study (RI/FS) in 1985 to delineate the contamination at the site and evaluate cleanup alternatives. USEPA disposed of 100 55-gallon drums, removed the underground tanks and installed a fence around the site.

After the initial RI/FS was completed, USEPA divided the investigation and cleanup of the site into two Operable Units (OU): contaminated ground water (OU1) and contaminated soils and buildings (OU2). In 1988 USEPA signed a Record of Decision (ROD) with NJDEP concurrence for OU1 that required extension of a public water line to six nearby residences with potable wells that were at risk of becoming contaminated, and installation of an on-site remediation system to extract and treat the contaminated ground water. The ROD also required a supplemental RI/FS to further evaluate the extent of the contamination in the soil and buildings. Responsible Parties for the site extended the water line in 1989 and completed construction of the OU1 ground water remediation system in 1996. Operation and maintenance (O&M) of the ground water remediation system are being conducted by the Responsible Parties under the supervision of USEPA.

In 1991, after completing the supplemental RI/FS, USEPA signed a ROD with NJDEP concurrence for OU2. The ROD required demolition of the site structures, excavation and solidification/stabilization of contaminated soil and wetland sediments with replacement of the solidified soil on site, and restoration of the affected wetlands. USEPA completed the Remedial Design for OU2 in 1995; however, federal budget constraints delayed implementation of the remedial action for several years. The first phase of the OU2 remedial action, demolition and removal of the site structures and asbestos abatement, was completed in 2000. USEPA finished excavating the contaminated soil and sediments and restoring the wetlands in 2003. The contaminated soil and sediments were disposed of at an off-site facility rather than stabilized and replaced on site as specified in the ROD. USEPA plans to issue an Explanation of Significant Differences (ESD) to amend the ROD to reflect this change in the remedy.

PROJECT NAME	RI/FS	DESIGN	CONSTR	O&M	
Fencing & Surface Removal					 Planned
Water Line (OU1)					 Underway
Ground Water Pump & Treat System (OU1)					 Completed
Soil & Buildings (OU2)					 Not Required

Southeast Boulevard Ground Water Contamination

Southeast Boulevard Vineland City Cumberland County

BLOCK: Various **LOT:** Various

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Not Applicable
OPERATION STATUS: Not Applicable

PROPERTY SIZE: Not Applicable

SURROUNDING LAND USE: Residential

MEDIA AFFECTED

Ground Water

CONTAMINANTS

Volatile Organic Compounds

STATUS

Confirmed

Potable Water

Volatile Organic Compounds

Alternate Water Supply Provided

FUNDING SOURCES









Spill Fund

AMOUNT AUTHORIZED

\$91,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Sampling conducted by the Vineland City Health Department in 2001 identified five private potable wells in this area that were contaminated with volatile organic compounds at levels exceeding New Jersey Drinking Water Standards. The primary contaminants were dichloroethylene (DCE), trichloroethylene (TCE) and tetrachloroethylene (also known as perchloroethylene, or PCE). NJDEP's Remedial Response Element delineated the Currently Known Extent (CKE) of the potable well contamination and Vineland City extended public water lines to the properties included in the CKE using funds provided by NJDEP. Six residences were connected to the public water lines and the potable wells at these properties sealed during the project, which was completed in 2001. Additional investigative work is planned to identify possible sources of the ground water contamination at this site.

PROJECT NAME	RI/RAS	DESIGN	CONSTR	O&M
Receptor Control (Water Lines)				
	 Planned			
	 Underway			
	 Completed			
	 Not Required			

Vineland Chemical Company Incorporated

1611 West Wheat Road

Vineland City

Cumberland County

BLOCK: 173 **LOT:** 1

CATEGORY: Superfund
Federal Lead

TYPE OF FACILITY: Chemical Manufacturing
OPERATION STATUS: Inactive

PROPERTY SIZE: 20 Acres

SURROUNDING LAND USE: Residential/Industrial

MEDIA AFFECTED	CONTAMINANTS	STATUS
Ground Water	Metals Trichloroethylene (TCE)	Treating
Surface Water	Metals	Delineated
Soil	Metals	Treating
Sediment	Metals	Delineated
Structures	Metals	Partially Removed

FUNDING SOURCES

AMOUNT AUTHORIZED

Superfund	\$88,300,000
1986 Bond Fund	\$2,750,000
Corporate Business Tax	\$7,194,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Vineland Chemical Company manufactured arsenic-based herbicides at this facility between 1950 and 1994. The site is adjacent to the Blackwater Branch, a tributary of the Maurice River. The Maurice River joins Union Lake about eight miles downstream of the site. The Vineland Chemical facility consisted of manufacturing and storage buildings, a laboratory, several lagoons and former chicken coops. Prior to 1977, the company stored wastes containing high levels of arsenic in the unlined lagoons and chicken coops. Preliminary sampling conducted in the early 1980s indicated that the on-site ground water and sediments in the Maurice River were contaminated with arsenic. USEPA added Vineland Chemical Company to the National Priorities List of Superfund sites (NPL) in 1984.

In 1985, USEPA began a Remedial Investigation and Feasibility Study (RI/FS) to delineate the contamination at the on-site and off-site areas and evaluate cleanup alternatives. USEPA determined based on the RI/FS that the soil at the Vineland Chemical plant was substantially contaminated with arsenic in localized areas, and the shallow ground water was contaminated with arsenic and to a lesser degree with cadmium and trichlorethylene (TCE). USEPA also confirmed that sediments and surface water in the Blackwater Branch, Maurice River and Union Lake contained elevated levels of arsenic due to the site.

In 1989, after completing the RI/FS, USEPA issued a Record of Decision (ROD) with NJDEP concurrence that outlined the final remedial actions for the four Operable Units (OU) that had been established at the site. The ROD required the following: consolidation and treatment, by in-situ flushing, of the on-site contaminated soils (OU1); installation of an on-site ground water remediation system to extract and treat the contaminated ground water (OU2); the excavation and treatment, by flushing, of the arsenic-contaminated sediments in the Blackwater Branch and Maurice River (OU3); and the excavation and treatment, by flushing, of arsenic-contaminated sediments in Union Lake (OU4). The ROD also specified that the treated sediments from the rivers and lake be redeposited in the floodplain.

USEPA later issued an Explanation of Significant Differences (ESD) for OU1 that changed the remedy from in-situ soil flushing to ex-situ soil washing. Under the new remedy, the contaminated soil will be excavated and transferred to an on-site soil washing facility for treatment and the cleaned soil will be replaced on site.

USEPA completed construction of the OU2 ground water treatment system in 2000 and the system is currently treating about one million gallons of water per day. The system is also preventing contamination from migrating off site through hydraulic control of the ground water. Construction of the OU1 soil washing plant was completed in October 2003 and operation and

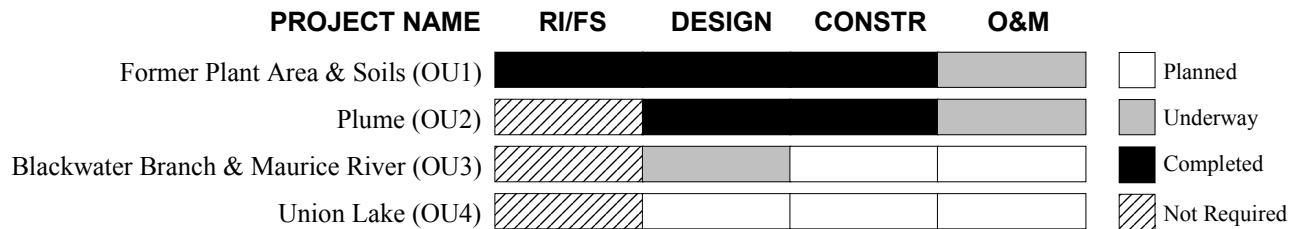
Vineland Chemical Company Incorporated

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maintenance of this system is underway. The soil cleanup is expected to take approximately two years to complete. The Remedial Design for the OU3 remedy will follow implementation of the OU1 remedy.

Funds for the Remedial Design of OU4 have been authorized; however, the ROD calls for a three-year waiting period after remediation of OU1 and OU3 before initiation of the Remedial Design to allow for natural flushing of the river system after the source of the contamination has been removed.

USEPA has finished demolishing and removing eight buildings that were contaminated with arsenic. The two remaining buildings are scheduled to be demolished in 2004.



Vineland City Municipal Wells 2,3 & 5

330 East Walnut Road

Vineland City

Cumberland County

BLOCK: 740 **LOT:** 6
763 6

CATEGORY: Non-Superfund
State Lead, IEC

TYPE OF FACILITY: Municipal Supply Wells
OPERATION STATUS: Inactive

PROPERTY SIZE: Not Applicable

SURROUNDING LAND USE: Residential

MEDIA AFFECTED

Ground Water

CONTAMINANTS

Volatile Organic Compounds

STATUS

Confirmed

Potable Water

Volatile Organic Compounds

Taken Out of Service

FUNDING SOURCES









Corporate Business Tax

AMOUNT AUTHORIZED

\$766,000

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Routine sampling conducted in 2002 revealed the water from these three municipal supply wells located at two separate well fields was contaminated with volatile organic compounds at levels exceeding New Jersey Drinking Water Standards. The primary contaminant in Wells 2 and 3 was tetrachloroethylene (also known as perchloroethylene, or PCE) and the primary contaminant in Well 5 was benzene. The sources of the contamination are unknown. In 2003 NJDEP's Remedial Response Element conducted a Remedial Alternatives Selection (RAS) that concluded the most cost-effective method to address the contamination was to install air stripper units at each of the well fields. Vineland City is designing and constructing the air strippers using funds provided by NJDEP. The engineering designs are completed and the air strippers are scheduled to be installed in 2004.

PROJECT NAME	RI/RAS	DESIGN	CONSTR	O&M
Receptor Control (Air Stripper)				
		Planned		
		Underway		
		Completed		
		Not Required		